

REMARKS

The amendments in the description are all corrections of minor clerical errors. The amendment in Paragraph [0009] is a correction of a minor clerical error, the need for which is apparent from Office records. The list of patents and applications in this Paragraph is stated to be E Ink and MIT patents relating to electrophoretic displays. U.S. Patent No. 6,249,721 is not assigned to either E Ink or MIT and does not relate to this technology. Hence, correction is obviously required, and Office records show that Patent No. 6,249,271 must be intended. The need for the amendments in Paragraphs [0077] and [0130] will readily be apparent from the context. No new matter is introduced by this amendment.

Prior to this Amendment, claims 1-32 were present in this application. Claims 1-16 and 28-32 stood withdrawn from consideration as directed to non-elected inventions. Claims 17-27 stood rejected. By this amendment, applicants formally cancel claims 1-16 and 28-32 without prejudice to their right to file continuation and/or divisional applications directed to the subject matter of these claims, maintain claims 17-27 unchanged, and add new claims 33-44 to give applicants the full scope of protection to which they believe they are entitled. These new claims are directed to articles of manufacture according to claim 17 or 21, or processes according to claim 23, using certain preferred types of electro-optic media mentioned in the specification. These claims are based, *inter alia*, on the definition of "solid electro-optic medium" in Paragraph [0005] of the specification, and the subsequent paragraphs discussing specific types of such media.

More specifically, claim 33 is directed to an article of manufacture according to claim 17 wherein the electro-optic medium is an electrophoretic medium comprising a suspending fluid, and a plurality of electrically charged particles suspended in the suspending fluid and capable of moving therethrough on application of an electric field to the suspending fluid. This claim is based, *inter alia*, on the aforementioned Paragraph [0005], Paragraph [0008] and the first sentence of Paragraph [0009]. Claim 34

is directed to an article of manufacture according to claim 33 wherein the suspending fluid and the plurality of electrically charged particles are present as a plurality of discrete droplets and a continuous phase of polymeric material surrounds the droplets. Claim 34 is based upon the same passages as claim 33 and Paragraph [0010], which discusses the so-called "polymer-dispersed electrophoretic" type of media to which claim 34 relates. Claim 35 is directed to an article of manufacture according to claim 33 wherein the suspending fluid and the plurality of electrically charged particles are retained within a plurality of cavities formed in a carrier medium. Claim 35 is based upon the same passages as claim 33 and Paragraph [0012], which describes the microcell media to which claim 35 relates. Claim 36 is directed to an article of manufacture according to claim 17 wherein the electro-optic medium is a rotating bichromal member medium or an electrochromic medium. Claim 36 is based, *inter alia*, on the aforementioned Paragraph [0005] and Paragraphs [0006] and [0007] which describe rotating bichromal member and electrochromic media.

Claims 37-40 and 41-44 are exactly parallel to claims 33-36 but are directed respectively to articles of manufacture according to claim 21 and processes according to claim 23. Accordingly, it is believed that the bases for claims 37-44 will readily be apparent from the discussion of the bases for claims 33-36 above.

Claims 17-24, 26 and 27 stand rejected under 35 USC 102(e) as anticipated by Holman et al., US 2003/0025855 A1. It is respectfully noted that Paragraph 2 of the Office Action states that the 35 USC 102(e) rejection over Holman applies to claims 17-24, 26 and 27, but that the text of the Paragraph only discusses claims 17, 19 and 20. Since claims 18, 21-24, 26 and 27 are rejected in Paragraph 3 of the Office Action over Holman, it is believed that the Examiner only intended to apply the 35 USC 102 rejection to claim 17, 19 and 20. If this is incorrect, it is respectfully requested that the remarks below with regard the 35 USC 103 rejection be considered as also applying to the 35 USC 102 rejection.

The 35 USC 102 rejection is traversed. More specifically, this rejection is traversed on the grounds that Holman does not describe any of (a) a solid electro-optic medium having first and second adhesive layers on opposed sides thereof, as required by present claims 17-20; or (b) a process using a solid electro-optic medium having first and second adhesive layers on opposed sides thereof, as required by present claims 23, 24, 26 and 27.

Present claim 17 is directed to an article of manufacture comprising a layer of a solid electro-optic medium having first and second surfaces *on opposed sides thereof*, a first adhesive layer on the first surface of the layer of solid electro-optic medium, a release sheet disposed on the opposed side of the first adhesive layer from the layer of solid electro-optic medium, and a second adhesive layer on the second surface of the layer of solid electro-optic medium (emphasis added). Thus, this claim requires that the two adhesive layers be present on opposed sides of the electro-optic medium.

The applicants agree with the Examiner's summary of the disclosure in Holman in so far as the Examiner states that Holman discloses in Figure 1 an article of manufacture comprising a layer of a solid electro-optic medium (130) having first and second surfaces on opposed sides thereof, a first adhesive layer (180) on the first surface of the layer of solid electro-optic medium (130), a release film (190) disposed on the opposed side of the first adhesive layer (180) from the layer of solid electro-optic medium (130). Applicants also agree that, in Paragraph [0087], Holman discloses applying an adhesive to the backplane. However, applicants do not accept that this disclosure of applying adhesive to the backplane anticipates any of the present claims.

To understand Paragraph [0087] of Holman, it is necessary to read this paragraph in conjunction with the preceding Paragraph [0086], which describes a conventional "single lamination" process for forming an electro-optic display. In such a single lamination process, Paragraph [0086] teaches, two sub-assemblies are formed, one containing the electro-optic medium, and a first substrate (110 in Figure 1 of Holman), and the other typically comprising a second substrate and an array of pixel electrodes

(i.e., the second sub-assembly comprises a backplane). A lamination adhesive is provided between the two sub-assemblies and adheres them together to form the final display (Paragraph [0086]. last sentence.

Paragraph [0087] then proceeds to teach that it is normally not practicable to simply bring the two sub-assemblies and the lamination adhesive together in a single operation, and hence that the lamination adhesive is normally first applied to one sub-assembly and thereafter this sub-assembly/adhesive combination is laminated to the other sub-assembly to form the final display. Paragraph [0087] teaches that it is usually most convenient to apply the adhesive to the sub-assembly containing the electro-optic medium, but that if desired the adhesive may be applied to the backplane. However, applying adhesive to the backplane in this manner (or even to both the sub-assembly containing the electro-optic medium and the backplane, a technique which is not discussed in Holman) will not produce an article of manufacture according to claim 17 or a process according to claim 23, since in both cases there will only be an adhesive layer on one surface of the electro-optic medium (130 in Figure 1 of Holman), namely the surface facing the backplane. Holman does not disclose, or in any way suggest, formation of an adhesive layer between the electro-optic medium (130) and the first substrate (110), and hence does not disclose or suggest formation of two adhesive layers on opposed sides of the electro-optic medium, as required by present claims 17 and 23.

This difference between Holman and present claims 17 and 23 is not merely a matter of design choice. As already noted, Holman forms an electro-optic display using a conventional single lamination process. On the other hand, the article of manufacture of present claim 17 is intended for use in the double lamination process of present claim 23, which involves two separate laminations. Holman does not disclose or in any way suggest such a double lamination process, since Paragraph [0087] of Holman teaches formation of the first sub-assembly containing the electro-optic medium by printing or similar deposition of the electro-optic medium on to the first (front) substrate, a process which manifestly does not require any lamination adhesive. As discussed in the

present specification (see, for example, Paragraph [0123] the double lamination process has advantages which are not possessed by the single lamination process of Holman, for example in forming an electro-optic display having a color filter array as the front substrate, where it may be difficult to deposit the electro-optic medium on the color filter array.

Turning to the 35 USC 103 rejection, the undersigned respectfully notes that the Examiner apparently accepts that Holman is only available under subsection (e) of 35 USC 102, and that consequently the 35 USC 103 is in fact a 35 USC 102(e)/103 rejection. The undersigned reserves the right to argue that Holman is not available as a basis for such a 35 USC 102(e)/103 rejection since Holman and the present application are commonly owned. However, in view of difficulties which the undersigned has encountered in securing a formal Assignment of the present application, the 35 USC 103 rejection will be treated herein "on the merits".

The 35 USC 103 rejection is traversed. More specifically, as regards claims 18 and 23-27, this rejection is traversed for the same reasons as the 35 USC 102 rejection discussed above, namely that Holman does not disclose or render obvious an article of manufacture comprising an electro-optic medium having first and second adhesive layers on opposed sides thereof, nor a process for using such an article of manufacture in the double lamination process as claimed in present claim 23.

Claims 21 and 22 require separate consideration. The Examiner notes that Holman discloses a layer of a solid electro-optic medium (130) having first and second surfaces on opposed sides thereof, and a first release sheet (190) covering the first surface of the layer of solid electro-optic medium (130), and applicants agree with this summary of the relevant disclosure in Holman. However, the Examiner concludes that it would have been obvious to include a second release sheet in Holman, since it has been held that mere duplication of the essential working parts of device involves only routine skill in the art, and with this conclusion applicants disagree. The case cited by the Examiner relates only to duplication of working parts within the same context, and is not authority

for the proposition that duplication of parts can never be inventive. In the present case, there is nothing in Holman to suggest providing a second release sheet covering the second surface of the electro-optic medium. Provision of a release sheet is only logical where there is present beneath the release sheet either an adhesive layer or a layer which can be laminated to another structure containing an adhesive layer. As already noted, in Holman the second surface of the electro-optic medium (130) is covered by an electrode (120) and a first or front substrate (110). The front substrate does not comprise an adhesive layer and there is no reason to laminate the front substrate to any other adhesive layer - or at least, Holman certainly does not suggest any such reason, since the front portion of the display comprising the electrode (120) and the front substrate (110) is complete and does not require the addition of any further layers in the production of the final display. Hence, there is nothing in Holman to suggest that there would be any purpose in providing a release sheet over the front substrate (110).

The 35 USC 103 rejection of claim 25 as unpatentable over Holman in view of Kazlas, US 2004/0014265 is traversed for the same reasons as the earlier 35 USC 103 rejection of claim 23, as discussed above. Kazlas does nothing to cure the failure of Holman to suggest a process using adhesive layers on opposed sides of the electro-optic medium.

Reconsideration and allowance of all claims in this application is respectfully requested.

Following this Amendment, this application will contain 23 claims, including three independent claims, whereas the applicants have already paid fees for 32 claims, including 12 independent claims. Accordingly, no additional claims fees are required by this Amendment.

An Information Disclosure Statement is also being filed herewith; this Information Disclosure Statement comprises both paper and electronic parts, and as explained in the paper part, the fee for the late filing of this Information Disclosure

Duthaler et al.
Serial No. 10/605,024
Amendment of March 11, 2005
Page 14

Statement is being paid with the first of the electronic parts thereof. The undersigned attorney would apologize for the late filing of this Information Disclosure Statement.

Respectfully submitted



David J. Cole
Registration No. 29629

E INK Corporation
733 Concord Avenue
Cambridge MA 02138-1002

Telephone (617) 499-6069
Fax (617) 499-6200
E-mail dcole@eink.com